

CSUSB Major Capital Outlay Projects Coordination



Capital Planning, Design and Construction

CSU San Bernardino

5500 University Parkway -FM-102

San Bernardino, CA 92407

Phone: (909) 537-5136

Fax: (909) 537-5989

CSUSB Major Capital Outlay Projects Coordination

This document outlines the process used during the planning, design, and construction of all Major Capital Outlay Projects managed by the Office of Capital Planning, Design and Construction (CPDC). This process establishes the CPDC Project Manager(s) as the hub for project communication and coordination among the User Groups, Campus Specialty Teams, Builder Team, Design Team, and Regulatory Agencies/Offices (see diagram below.) The groups involved with a Major Capital Outlay Project are as follows:

- **User Groups** – User Groups shall include, but are not limited to, any department or organization that will occupy the facility (e.g., the client department(s), college(s), academic affairs interdisciplinary division, etc.)
- **Campus Specialty Teams** – Campus Specialty Teams shall include any department, administrator(s), or team of campus professionals that will be involved in providing design input, maintain or operate the building (e.g., Facilities Services, IRT (TNS, ACM & AV), University Police, Parking Services, Services to Students with Disabilities, Executive Administration, etc.)
- **Builder Team** – General Contractor and Sub-Contractors
- **Design Team** – Project Architect/Engineering Consultants/Specialty Consultants
- **Regulatory Agencies/Offices** – Chancellors Office, Procurement, DSA, State Fire Marshall (SFM), Mechanical Review Board, Seismic Peer Review Board, etc.



Figure 1 - CPDC Project Management Communication

CSUSB Major Capital Outlay Projects Coordination

A Major Capital Outlay Project is divided into four phases: Planning, Design, Bidding and Construction. The phases outlined in this document are based upon the California State University's submittal guidelines as set forth in the *State University Administrative Manual (SUAM) and CSU Submittal Requirements and Procedure Guide.*

A. Planning Phase/Feasibility Study

1) Feasibility Study

The purpose of the feasibility study is to develop a conceptual project scope and budget. This phase will determine if a project is feasible. During this phase, conceptual design intent is developed based on programmatic requirements and design guidelines.

- a) When determined that a project will require funding or endowment through private donations or fundraising, the President will appoint a *Fundraising Committee* to pursue the funding objective. The Fundraising Committee will provide the President with the appropriate updates and briefings during the fundraising effort.
- b) During the feasibility study, the Office of CPDC will arrange meetings between the appropriate User Groups, Campus Specialty Teams and the Project Architect/Engineer to discuss the preliminary requirements for the building program and building systems.
- c) The Office of CPDC will provide a project narrative for the applicable User Groups and Campus Specialty Teams to review and provide comments.
- d) All User Groups/Campus Specialty Teams receiving a project narrative will submit **written** comments to the CPDC Project Manager within fifteen (15) **business** days. *(Note: Any User Group/Campus Specialty Team receiving multiple copies must compile all comments into one (1) document prior to submittal to CPDC).*
- e) The Office of CPDC shall review all comments and forward applicable items to the Design Team. If it is determined that a meeting between the User Groups/Campus Specialty Team and Design Team is needed, the CPDC Project Manager will be responsible for scheduling such meeting.
- f) The most current approved Campus Standards/Design Guidelines will be provided to the Design Team by CPDC.

CSUSB Major Capital Outlay Projects Coordination

- g) A briefing will be held with the President for final approval.

B. Design Phase

1) Schematic Design (SD)

At this phase, a well defined project configuration is developed. Program requirements, building system assumptions, and recommendations acquired during the Feasibility Study are incorporated into the schematic design. (NOTE: Comments by the User Groups and/or applicable Campus Specialty Teams to request change to building systems shall be **submitted at this phase**. Request for changes after this phase will impact the project scope and overall budget.)

The Office of CPDC will arrange meetings between the User Groups, related Campus Specialty Teams, and the Design Team to discuss building details and to validate the design direction is in accordance with project objectives. **The Office of CPDC will also invite the campus community to attend “open forum workshops” with the Design Team to allow suggestions, comments or concerns regarding the proposed project.** The most current approved Campus Standards/Design Guidelines will be provided to the Design Team by CPDC.

- a) The Office of CPDC shall provide plan drawings to the applicable User Groups and applicable Campus Specialty Teams for review.
- c) All User Groups and Campus Specialty Teams receiving plan drawings or plan specifications will submit **written** comments to the CPDC Project Manager within fifteen*¹ (15) calendar days. *(Note: User Groups and applicable Campus Specialty Teams receiving multiple copies must compile all comments into one document prior to submittal to CPDC).*
- d) The Office of CPDC shall review all comments and forward items to the Design Team. If it is determined that a meeting between the User Groups/Campus Specialty Team and Design Team is needed, the CPDC Project Manager shall be responsible for scheduling such meeting.

¹ Holidays and campus closures will be excluded from the calendar day count.

CSUSB Major Capital Outlay Projects Coordination

- e) CPDC shall confirm to each User Group/Campus Specialty Team that all comments have been addressed. Should CPDC or the Design Team determine that a request/recommendation from the User Group/Campus Specialty Team is unreasonable or cannot be achieved due to budgetary constraints or other limitations, a written response will be provided stating the reason(s). If needed, a meeting will be scheduled by CPDC inviting all applicable parties to attend; if necessary, the VP for Admin and Finance will be invited to the meeting to evaluate the situation and render a final decision. A log of all comments, with action taken, will be transmitted by CPDC to the User Groups/Campus Specialty Teams.

- f) A briefing will be held with the President for final approval.

2) Design Development (DD)

The purpose of design development is to demonstrate, with greatest detail, all project features and/or systems to demonstrate that all project requirements have been met and accounted for. (Note: Comments by the User Groups/Campus Specialty Teams to request minor adjustments or refinements to the project design are possible at this phase.)

- a) The Office of CPDC will arrange meetings between the User Groups, applicable Campus Specialty Teams, and the Design Team to discuss building details and receive comments on the progress drawings.

- b) The Office of CPDC will provide a set of drawings to the applicable User Groups/Campus Specialty Teams for review and comments.

- c) All User Groups and Campus Specialty Teams receiving drawings or plan specifications shall submit **written** comments to the CPDC Project Manager within fifteen^{*2} (15) calendar days. (Note: User Groups and Campus Specialty Teams receiving multiple sets of drawings must compile all comments into one document prior to submittal to CPDC).

- d) CPDC will confirm with each User Group/Campus Specialty Team that all comments have been addressed. Should CPDC or the Design Team determine that a request/recommendation from the User Group/Campus Specialty Team is unreasonable or cannot be achieved due to budgetary constraints or other limitation; a written response will be provided stating the reason(s). If needed, a

² Holidays and campus closures will be excluded from the calendar day count.

CSUSB Major Capital Outlay Projects Coordination

meeting will be scheduled by CPDC inviting all applicable parties to attend; if necessary, the VP for Admin and Finance will be invited to the meeting to evaluate the situation and render a final decision.

- e) A briefing will be held with the President for final approval.

3) Construction Document (CD)

The Construction Document (sometimes referred to as the Working Drawing phase) is primarily focused on the development of information necessary for the Builder Team (contractor) to build the building. Minimal input is required from the User Groups and Campus Specialty Teams during this phase.

- a) Both 50% and 90% Working Drawing submittals will be shared with the Campus Specialty Teams and User Groups.
- b) The Office of CPDC will review all construction documents to ensure contract compliance by the architect and to make certain the architectural parameters of the project are maintained. Additionally, the Project Manager will also ensure that the following elements are enforced: scope of project is within budget, user group/campus specialty team comments have been incorporated into the document, back check corrections from regulatory agencies are included, and the general construction review is provided.
- c) The Office of CPDC shall review all comments and forward applicable items to the Design Team. If it is determined that a meeting between the User Groups/Campus Specialty Teams and Design Team is needed, the CPDC Project Manager will be responsible for scheduling the meeting.
- d) The Office of CPDC will forward copies of the final 100% construction documents to the User Groups and applicable Campus Specialty Teams for final review and comments. The CPDC Project Manager will obtain signatures from the appropriate User Groups and Campus Specialty Teams acknowledging the review of the documents prior to bidding the project. The CPDC Project Manager will incorporate any relevant comments into the final document. Any additional comments received during this phase may be indicated at the bottom of the signature sheet. The CPDC Director will review the comments and determine whether to postpone the bidding process or to proceed.

CSUSB Major Capital Outlay Projects Coordination

- e) CPDC will confirm with the User Group/Campus Specialty Teams that all comments/recommendations have been addressed. Should CPDC or the Design Team determine that a request/recommendation from the User Group/Campus Specialty Team is unreasonable or cannot be achieved due to budgetary constraints or other limitation; a written response will be provided stating the reason(s). If necessary, a meeting will be scheduled by CPDC inviting all applicable parties to attend; if necessary, the VP for Admin and Finance will be invited to attend the meeting to evaluate the situation and render a final decision.
- f) When the project exceeds the budget, all stakeholders will be included, as applicable, in the value engineering recommendations. Final recommendations on value engineering shall be endorsed by the VP of Administration and Finance.
- g) A briefing will be held with the President for final approval.

C. Bid Phase

During the bid phase, the Office of CPDC will extend an invitation to the User Groups and Campus Specialty Teams to attend the Bid Opening.

D. Construction Phase

1. After the contract is awarded, the Office of CPDC will invite the User Groups and applicable Campus Specialty Teams to attend the Pre-Construction Meeting with the Design and Builder Teams. This meeting will focus on the overall project parameters between the contractor, architect, and university departments. The roles, staff assignments and responsibilities of the project teams will be addressed at this meeting.
2. The CPDC Project Manager will schedule monthly progress meetings with the User Groups and applicable Campus Specialty Teams. These meetings will be scheduled during construction to provide the User Groups/Campus Specialty Teams with construction progress reports and to discuss any coordination issues that may occur. The VP for Admin and Finance will be invited to attend the progress meetings as necessary.
3. The CPDC Project Manager will meet with the Design and Builder Teams on a regular basis to coordinate current and projected construction activities such as construction schedule, change orders, submittal process, design drawings conflicts,

CSUSB Major Capital Outlay Projects Coordination

site conditions, etc. Should an issue occur that requires input from the User Group/Campus Specialty Team, the Project Manager will schedule a **special** meeting with the User Group/Campus Specialty team, to address the specific issue. The VP for Admin and Finance may be invited to attend the meeting, when needed, to make the final decision on critical issues.

4. All project related correspondence including but not limited to Request for Information (RFI), submittals, etc., will be routed to the CPDC Project Manager. The CPDC Project Manager shall forward RFIs relating to mechanical, electrical, doors & hardware, plumbing and telecom issues to Facilities Services for review and comment prior to final response to the contractor. Any comments shall be received within a reasonable time period so as to prevent delays in the project.
5. The CPDC Project Manager shall forward submittals relating to roofing, mechanical, electrical, doors & hardware, plumbing and telecom issues to Facilities Services for review and comment prior to approval of the submittal. Facilities Services shall coordinate all submittal comments into a single document and return to the CPDC Project Manager. Any comments shall be received within a reasonable time period so as to prevent delays in the project. Any substitutions will be forwarded to Facilities Services for review and concurrence.
6. The Office of CPDC will assign a SUAM qualified Inspector of Record to each project and will hire additional specialty inspectors as necessary. The Office of CPDC will involve additional inspection services from the Engineer of Record as needed.
7. The construction site, as defined during the Pre-Construction Meeting, will be the sole responsibility of the General Contractor. The site maintenance, safety, and security will be provided and coordinated by the general contractor. Due to liability issues, access to the construction site is **restricted** to the general and sub-contractors, CPDC Construction Administrator, CPDC Project Manager(s), and the CPDC Inspector of Record. All visits to the construction site shall be requested in writing to the CPDC Project Manager, CPDC Inspector of Record, or the CPDC Construction Administrator.
8. The CPDC Project Manager or the CPDC Inspector of Record will arrange “pre-installation” meetings/visits with Facilities Services and other specialty groups (as applicable) at various phases of mechanical, electrical, plumbing, audio visual and telecom construction. The “pre-installation” meetings/visits will provide Facilities

CSUSB Major Capital Outlay Projects Coordination

Services and other campus specialty teams with an opportunity to identify any areas of concern based upon previous experience.

9. The CPDC Project Manager or the CPDC Inspector of Record will arrange for the User Groups/Campus Specialty Teams to visit the construction site at pre-determined construction intervals referred to as “*milestone observation visits*”. Access to the construction site outside of the milestone observation visits must be approved by the CPDC Project Manager, CPDC Inspector of Record, or the CPDC Construction Administrator.
10. Milestone Observation Visits will be conducted by the CPDC Project Manager, CPDC Inspector of Record, or the CPDC Construction Administrator. Any User Group/Campus Specialty Team attending a milestone visit shall submit all observation comments to CPDC on the **CPDC Milestone/Observation Visit** form within 48 hours of the observation visit. Comments will be considered an “observation only” and will not be treated as a formal inspection. All observation comments shall be logged and reviewed by CPDC. Any observation comments deemed appropriate will be reviewed with the general contractor for compliance. A written response to the observation(s) shall be provided to the remitter of the observation comment. The CPDC Project Manager(s) will assure compliance with the drawings and specifications and the recommendation will be enforced. For observations that the CPDC Project Manager(s) or Inspector of Record deems “not applicable”, the Project Architect/Engineer of Record will be consulted for final recommendation/determination.
11. In alignment with the Chancellor’s Office, CPDC will hire a commissioning consultant during the design phase of the project to establish and document building criteria for systems functions, performance, and maintainability, as well as verify and document compliance with these criteria throughout design, construction, start-up, and the initial period of operations. The CPDC Project Manager, Commissioning Agent, Design Team, Builder Team, and representative for Facilities Services (the Operator) will work together as a team for achieving the commissioning objectives.
12. Prior to the completion of the project, the Office of CPDC will schedule a Close Out meeting between the contractor, the appropriate Campus Specialty Teams, and CPDC staff to review and coordinate submittal of O & M manuals, warranties, as-builts, and other close-out documents.

CSUSB Major Capital Outlay Projects Coordination

13. The Office of CPDC will schedule contractor led training sessions, with the applicable Campus Specialty Teams to ensure they are familiar with the building systems and have the appropriate knowledge to operate the facility.
14. At the completion of the project, the CPDC Project Manager will schedule the punch-list walk-thru with the User Groups, applicable Campus Specialty Teams, Project Architect/Engineer of Record, and the CPDC team. A copy of the final punch list will be provided to the User Groups/Campus Specialty Teams. Final acceptance/rejection of disputed punch-list items shall be enforced by the Project Manager and the Inspector of Record. The acceptance/rejection of punch-list items shall be provided in writing.
15. The CPDC Project Manager shall forward all punch list items to the Architect to compile a Master Punch List. Following completion of the Master Punch-List, no additional items may be added or deleted from the punch-list.
16. Should the building be occupied prior to receiving final completion, all building related problem calls shall be forwarded to the CPDC Project Manager/Inspector of Record.
17. After final completion of the building, Facilities Services, or the appropriate auxiliary organizations shall begin operating the building. Facilities Services, or the appropriate auxiliary, shall send warranty forms to the contractor for any warranty related items that occur after final completion of the building.
18. Briefings will be held with the President on the construction progress for updates and final approvals.